



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,478	08/14/2006	Amine Badaoui	OT-5168	8356
26584 7590 06/13/2008 OTIS ELEVATOR COMPANY INTELLECTUAL PROPERTY DEPARTMENT 10 FARM SPRINGS FARMINGTON, CT 06032				
EXAMINER				
KRUER, STEFAN				
ART UNIT		PAPER NUMBER		
3654				
MAIL DATE		DELIVERY MODE		
06/13/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/589,478

Applicant(s)

BADAQUI ET AL

Examiner

Stefan Krueer

Art Unit

3654

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE-08)
- Paper No(s)/Mail Date 14 August 2006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Claim Objections

Claim 9 is objected to because of the following informalities: Line 3 (First line of Page 10), "each rolling" is preferably written as "rollers". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 - 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 – 3, 5 and 9, Lines 11, 3, 4, 2 and 3, of the respective claims, recite the limitation "the" in "the car door drive belt", "the car door support trolley panel", "the trolley panel", "the opening position", and "the opposite upper sides", respectively.

There are insufficient antecedent bases for these limitations in the claims.

Furthermore, **Claims 1 and 3** recite the limitation "of the kind" in Line 2 and "generally" in Line 8, respectively, rendering the claims indefinite because it is unclear whether the limitation(s) following the phrases are part of the claimed invention. See MPEP § 2173.05(d).

Additionally, **Claims 5 and 7**, Line 8 and 6, respectively, recite "...its final drive position..." and "... at their ends", whereby, in both claims, a nominative to which each of "its" and "their" refers is unclear and thereby indefinite.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

Art Unit: 3654

art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 7 - 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In **Claim 7**, the recited "...two upper and lower connecting rods.." are disclosed as either "two connecting rods" or "upper and lower connecting rods" - thereby two connecting rods in total - not four connecting rods as recited.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 2 and 5 - 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Husmann (4,947,964).

Re: Claims 1 and 10, Husmann discloses a coupling device (1, Fig. 2 and 5) for elevator car- and landing doors (30 and 43, Fig. 2, respectively) comprising moving cams (2, 3) integral with the car door and driving the landing door in front of a story landing by means of a coupling plate (holding 20 – 23, 25) integral therewith and engaging with the cams (2, 3), locking it mechanically and electrically (by means of 20, 12) upon door closure to allow the subsequent drive of the car, characterized in that said cams are movably mounted with a variable distance from each other on the car door, independently from the car door drive belt, and that it comprises a part (9) to drive the cams with a variable distance, which is mounted on the car door and connected to a drive belt (42.2) and to one of the cams (2), said part exerting a lever action on said cam to drive it towards and away from the other cam a large displacement relative to a

Art Unit: 3654

small overtravel drive of the belt, in order to respectively allow to unlock the coupling plate and a landing door drive coupling when the doors open and to lock it when they are closed.

Re: Claim 2, Husmann discloses said part to drive the cams apart is a connecting rod hinged on the car door support and hinged by an attachment tab (19) to the door drive belt and to said driven cam.

Re: Claim 5, Husmann discloses the opening position of the cams (3) unlocking mechanically and electrically the coupling plate is advantageously locked in position with an appropriate distance between the cams so as to maintain the plate unlocked, by means of a locking element (23) that mechanically engages said driven cam (by 14, 24, Col. 4, L. 23) brought into its final drive position.

Re: Claim 6, Husmann discloses the cam opening position is locked in position by means of a final position stop against the connecting rod and of an associated hook element with a self-snapping engagement, locking the connecting rod in position, wherein these elements engage as soon as the car door drive belt has been driven over a determined overtravel length as the doors open and close (Col. 4, L. 30 – 42).

Re: Claim 7, Husmann discloses the cams are mounted movably with a variable distance from each other on the car door, by means of a set of upper and lower connecting rods (7, 8) hinged in a vertical parallelogram and connected to the car door in their middle and to the cams at their ends, wherein the displacement of the cam connected to the drive rod is coordinated with the displacement of a corresponding terminal hinge point of the cam drive connecting rod.

Re: Claim 8, Husmann discloses the cam drive connecting rod can be replaced by a set of two connecting rods hinged to each other, the first rod being hinged to the car door and connected to the drive belt and the second being linked to the driven cam, which makes cam drive coordination easier.

In reference to the claim language referring to "... can be replaced by a set of two connecting rods hinged to each other..." and "... making cam drive coordination...",

Art Unit: 3654

intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. In re Casey, 152 USPQ 235 (CCPA 1967); In re Otto, 136 USPQ 458, 459 (CCPA 1963).

Re: Claim 9, Husmann discloses rollers (44, 45) on each of opposite upper sides of the cams; however, Husmann is silent with respect to a catch picking element for the landing door acting when the cams come closer on door closure and released when the cams move apart as the doors are open, and an electrical landing door locking contact element (43, 45) operating in the same way as the catch picking element and closing the elevator car control circuit.

Nevertheless, the use of landing door locking mechanisms having electrical signal feedback for operational control, wherein such locking mechanisms are coupled with said rollers of Husmann are well known in the art.

Allowable Subject Matter

Claims 3 - 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims as well as to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Zappa (6,474,448) is cited for a landing door locking mechanism.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

Art Unit: 3654

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571.272.6856. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

/Stefan Kruer/

Examiner, Art Unit 3654

9 June 2008

/Peter M. Cuomo/

Supervisory Patent Examiner, Art Unit 3654